NATIONAL INTELLIGENCER.

MR. COUES'S FORMULA.

FOR THE NATIONAL INTELLIGENCER.

MR. COUES'S *Method of Calculating the Periods of the Axial Rotation of the Planets of the Solar System.*

We first present a table of the elements which are used in the calculations: the first column being the major axes of the orbits; the second, the mean diameters of the planets; the third, their periodic times.

No. 1.

First Group.	Miles.	Miles.	Days.
Mercury	73,648,000	3,226	87.97.
Venus	137,620,000	7,810	224.70.
Earth	190,750,000	7,920	365.25.
Mars	290,864,000	4,222	687.97.
Second Group.			
Jupiter	992,109,000	87,000	4,332.
Saturn	1819,363,000	78,000	10,759.
Uranus	3659,053,000	34,000	30,686.
Neptune	5707,884,000	40,000	60,126.

We next offer the method of calculating the periods of the rotation of the planets. (See table No. 2.)

The first column of figures gives the periodic times of the planets as *dividends*. The next column gives the number of times the planet's diameters are contained in the major axes of their orbits as *divisors*. The third column contains the quotients multiplied by 100, (one hundred sun-diameters being the average of the mean distances of the first group.) These products, multiplied by 24—the Earth's day divided into hours—give the periods of the rotation of the planets in hours, as in the fourth column.

The number of times the diameter of a planet is contained in the major axis of its orbit is also the number of times the circumference of the planet is contained in an orbit or circle of which the major axis is the diameter.

In the second group of planets the quotients (third column) have the decimal points unchanged.

No 2.

First Group.		Hours.
Mercury	87.97÷22820= .38¼ ×24=	9.24
Venus	224.70÷17618=1.27 ×24=	30.60
Earth	365.25÷24145=1.50 ×24=	24.00*
Moon	29.53	12.00
Mars	686.98÷68892=.999 ×24=	24.00
	1394.43 133475 4.16 ×24=	99.84
Second Group.		
Jupiter	4332÷ 11404= .380×24=	9.13
Saturn	10759÷ 23335= .461×24=	11.06
Uranus	30686÷107620= .285×24=	6.84
Neptune	60126÷142500= .422×24=	10.12
	1.548×24=	37.15

For further explanation of the two foregoing tables: The mean distances (the double of which are the major axes of the orbits of the planets) are results of calculation from the accurately known periodic times by our formula. These (major axes) agree very nearly with the values usually assigned by astronomers. The mean diameters of the planets are from "Herschel's Outlines," with a slight change in the diameters of Mercury and Mars, both being enlarged about 100 miles.

It is evident that, with the knowledge of the diameter of a planet and its period of rotation, the converse use of the method will give the planet's mean distance from the sun; and that, its rotation and mean distance being given, the diameter of the planet can be obtained.

The Earth's diameter is 7,920 miles, (the mile being 1-7920 of this mean diameter,) and is contained in the major axis of its orbit 24,085 times. We substitute 24,145 times, being an addition of sixty times; for, the moon's distance from the earth is sixty earth-diameters. This is added, as we seek the joint or aggregate period of Earth and Moon.

We shall not examine the rotary periods of the second group in their sum or aggregate, as this group is incomplete; there being, according to our views, an undiscovered planet of this family.

Aggregate of the Rotary Periods of the First Group.

We now examine the rotary periods of the first group in their aggregate, in order to show their correctness.

Proposition: The Earth's year being the mean of the periods of its group of four planets, the Earth's day will be the mean of the rotary periods.

	Days.
Periods of the four planets (table 2d)	1394.42
Add twice rotation of the Sun	50.42
Add the Earth's lunar epicycle	14.48
Add twice the planet's rotation	8.32
	1467.65
Deduct 266.66÷100†	2.66
	1464.99

1464.99+ is the aggregate or sum of the motions. 1464.99, divided by 4 for the four planets, gives as quotient 366.25 days.

The Earth's rotation on its axis and its motion in lunar epicycle are as one motion. The rotary period of the Earth is 24 hours; the lunar motion is 1-25th of rotation; 1-25th of 24 hours is .96; and both motions added, 24.96 hours. We will divide the sum of the rotary periods of the four planets by 24.96.

99.84÷24.96=4

The Earth's period is therefore the mean of the four planets' periods; that is, one-fourth of these periods.

Second proposition: If our obtained periods are the true periods, from these periods the Earth's year—viz. 365.25 days—can be deduced:

Rotation.	Days.
Mercury	0.385×100.= 38.50.
Venus	1.270×100 =127.00
Earth	1.000×100 =100.00
Mars	1.000×100 =100.00
3.655	365.50

The variation in the deduced periods of rotations which is required to produce 365.25 is .25×.100=.0025 of a day.

The rotary Periods of the two Groups of Planets discussed, each Planet by itself.

Earth and Moon.—We shall consider the rotary periods of these spheres, after having discussed the rotations of the other planets, remarking in this place that the Earth's period (be it more or less) stands as one—as a standard of measure divided into twenty-four equal parts, called hours: and that the moon's period is equal to and stands at half or twelve hours: for we know that the moon's *revolution* about the earth is twice the velocity of a spot of the earth's equator round the axis of the earth: and the velocity of the moon being double, its completed period is half the earth's period.

Mercury: We deduce 9.24 hours as the period of the rotation of this planet. Observation cannot give the period. Mercury is very near the sun, and consequently so bright and glaring that its rotation cannot be detected. Schröter considered that he had evidence of the existence of mountains, and he *believed* that its rotation is completed in about 24 hours. No subsequent astronomer has been able to add any thing to our knowledge of this period. (Hind's Solar System.)

Venus: The formula gives 30.60 hours as the rotatory period of this planet. The results of repeated observations differ widely, from something less than 24 *hours* to something less than 24 *days*. Some astronomers have supposed that they could see spots on the disc of this planet, while others cannot discover any marks indicative of its rotary period. Professor Hind says that the disc of Venus is too bright and glaring to allow of any precise knowledge of the subject. The inclination of its axis of rotation even is unknown.—(Rees's Ency. See also Desaguliers, Ferguson's Astronomy, Hind's Solar System, &c.) If the period of the rotation of this planet is "less than 24 hours," *it is proof that the planet has a satellite;* for only in that case can the planet's period of rotation be less than 24 hours, as is given in astronomical tabular statements.‡

* The joint period is 36 hours; as the velocity of equivalent revolution is double the velocity of rotation, the rotation of the moon is considered as completed in half of the earth's period.

† 266.66, as after shown, is 4 × 66.66; 66.66 is the proportion of the Earth's velocity of revolution to its velocity of rotation as one.

‡ If there be a satellite, is not its period round its primary 17.14 days?

Mars: The formula gives as the period of t e [illegible] of this planet exactly 24 hours—the period of the earth's rotation. This presents an instance of the beautiful harmony of the members of the solar system;—the diameter of Mars so adjusted to its distance that its period of rotation is equal to another planet's—the Earth—of different diameter and distance.

Observation does not contradict our result, though it has given to Mars a rotation completed in 24.61 hours, (24 hours 37 minutes;) for observed periods of rotation are considered as approximations only. This period of Mars is obtained by evanescent spots on very faint belts; and these spots *may* have a motion of their own, independent of the rotary motion of the surface of the planet. But we have not the least doubt of the deductions. The rotary periods of Mars and the Earth are of equal length. We arrived at this result by other calculations. For instance, take the value 2,900,300 (no matter for the present how obtained) and divide it by the Earth's periodic time, (366.25 days,) the quotient, 7919 miles, is *the diameter of the earth;* so 2,900,300, divided by the periodic time of Mars, (687 days,) the quotient, 4222 miles, is *the diameter of Mars.* A like result cannot be had with Venus and Mercury, because their periods of rotation differ from the common period of the Earth and Mars.

Jupiter: The deduction is 9.13 hours for the rotary period of this planet. Observation gives (9 hours 56 minutes) 9.96 hours.

This period by observation is acknowleged to be obtained with only *considerable* accuracy. To show this we quote the following from Rees's Encyclopedia, Art. Astronomy:

"By means of the spots (on evanescent belts) the rotation of Jupiter has been ascertained with *considerable* precision."

Saturn: The rotary period of this planet is by the formula 11.06 hours. The result of observation is 10.26 hours. It was obtained by Sir William Herschell by a frequent and careful examination of faint belts with reference to their forms and configurations, by a combination of which he *concluded* that the length of the day of Saturn is 10 hours 16 minutes.

Uranus: By deduction the rotary period of this planet is 6.84 hours. It is *unknown* by observation.

Neptune: By deduction the rotary period of this planet is 10.12 hours. Like Uranus's period, Neptune's period is *not* given by observation.

EARTH'S ROTATION.

We now return to the discussion of the earth's period. It is admitted by astronomers that they know of no law which determines the rotary periods of the planets. They can give no reason why, for instance, the earth turns on its axis say 366, and not 300 nor 400 times in a year.

By the mean distance of the earth from the sun, in *sun*-diameters, its year or periodic time is determined. So, by the length of the major axes of its orbit, measured in *earth*-diameters, is its day or axial time determined. Other results in calculating rotary periods on this principle prove the soundness of the principle.

The value obtained by the division of the earth's period by the number of times the earth's diameter is contained in the major axis of its orbit is 1.50; 1.50 × 100 = 150. 100 sun-diameters is the mean distance of the spheres of the first group. Then—

$$\frac{100}{150} = 66.66.$$

The rotation of the earth to its revolution is as 1 to 66.+

Proof.—The earth moves in its orbit 1,644,000 miles in a day. The earth moves in rotation the length of its circumference in one day, at its equator, 24884 miles.

1664000÷24884 = 66.66.

By *another method:* we divide the circumference of the sun into the major axis of the earth's orbit—

190,750,000 ÷ 2733720 = 69.64.*

From 69.64 deduct 1-25th of 69.64, (to wit, 2.79) = 66.85; also, 1-365th of 66.85, (to wit, 19,) and the remainder is 66.66.

Once more: The sun's circumference is 2,733,720 miles. Let the solar day stand as unit, and 2,733,720 decimally reduced is the difference between the solar and the sidereal day; for the solar day in sidereal time is 1.002733+. For a slight discrepancy in further decimals we can account.

ROTATION OF THE MOON.

We have placed the rotary period of the moon at 12 hours; and accordingly we find the velocity of the motion of the moon around the *earth* to the velocity of its motion round the *sun* to be as 1 to 33.33; while the earth's rotation to the earth's revolution is as 1 to 66.66.

The moon has no rotation proper; for rotation proper is the circumference of a sphere turning around a centre within the sphere, which the moon does not, though the act of moving round the earth necessarily includes the presentation of every point in the circumference of the moon to a fixed star.†

We will calculate the moon's rotation by our formula: Its major axes of orbit round the earth is 474,638 miles. Its diameter is 2,160 miles. Its period is 12.37 times in a year.

474,638 ÷ 2,160 .... = 19.74

12.37 ÷ 219.74 = .00562 × 100 = 562 × 24.... = 13.28

As the moon does *not* turn on its axis, the part of the moon furthest from the earth, in moving round the earth, moves more than the part of the moon the nearest to the earth *by twice the circumference of the moon.* In every lunation this inequality occurs. There must be a compensatory or balancing motion.

This equalizing motion (which is the moon's rotation) is the revolution of the apsides of the moon's orbit.‡

For, twice the circumference of the moon is contained in its orbit 109.87 times. The revolution of the moon's orbit is completed in, say, 109.87 lunations.

The value of this motion can be readily calculated. For twice the moon's circumference is (6887 × 2 =) 13,774 miles; then, as 24,884 miles (the earth's circumference) is to 24 hours, so is 13,774 to 13.28, the desired answer. The moon's revolution of the apsides of its orbit is 13.28 hours. *We produced 13.28 hours by our formula.*

But why is the revolution of the moon's perigee 13.28 hours, if it stands in place of rotation, having deduced the rotation of the moon as 12 hours?

If a man sails around the Earth while the earth is turning on its axis, he gains or loses a day according to the direction in which he moves. So the moon's orbit by turning round as the moon revolves, gains one turn or 109.87 of its amount every lunation.

This revolution of the moon's orbit is equivalent to 13.28 hours; 13.28 ÷ 9.87 = say 1.28; deduct 1.28 from 13.28 = 12. hours.

By a very fractionally minute computation it can be proved that the revolution of the moon's perigee exactly equals 12 hours; agreeing with our deduction by formula for the rotation of the moon in the second table.

We have dwelt somewhat long on the revolution of the moon's orbit because it elucidates the nature of axial rotation. We see that the value of this motion of the moon, as a compensatory motion, is determined by *twice* its circumference in its orbit.

So the axial rotation of the planets is a compensatory motion. Without rotation the part of the earth the furthest from the sun must have the greater velocity to go round the sun in the same time. But by rotation every particle composing the earth has a mean motion the same as the motion of the centre of the earth in its annual revolution. Of course, then, our formula is sound; the *rotary* period of the earth is determined by *once* its circumference in its orbit.

An objection will be made that we take the orbits of the planets as circles, of which the mean distances are radii, not allowing for eccentricity of orbit.

This is easily answered: there is only one element of the orbits of the planets known—their mean distances, major axis, or long diameters of orbit. This, the *depth* of the cycloidal arch, firm and unchanging, is firm and unchanging because it is a measurable value; and from it periodic times can be deduced without regard to eccentricity or to the other side of the orbit. The length of the span of the cycloidal arch of an orbit, called the minor axis, is a value which *will* be obtained when the velocity of the great motion of the planets with the sun around he Prime Centre is obtained; and we believe that the period of this great circuit can be deduced, having as the elements of the calculation the period of rotation on its axis and the diameter of the sun. Surely, having the earth's diameter and rotary period, we can arrive at the earth's period of revolution round the sun; and "all things are double one against the other."*

S. E. COUES.

WASHINGTON, DECEMBER 8, 1853.

* 69.64 includes the motion of the earth in lunar epicycle, which is 1-25th of its rotation.

† For this reason, the earth adds one revolution on its axis relatively to the fixed stars—rotating 365 times as seen from the sun, 366 times as seen from the fixed stars. This difference, one rotation in a year, is what astronomers call the moon's rotation on its axis—one turn in a revolution. (See Hopkin's Geology.)

‡ Think of a marble rolling round the edge of an oval table while the table is turning round in the same direction; you will see that the motion of the table is an addition to the motion of the marble. So the moon moves about the earth in an *oval* orbit, and the oval orbit moves round.

* The article is compressed for the columns of a newspaper; we hope at a future time to go more fully into the rationale of the method.

We omitted to say that the sum or aggregate of the number of times the diameters of the planets of the first group are contained in their orbits is (see table No. 2) 133475 times, deduct 60 (for the moon,) = 133415 times. The square root of 133333 is the periodic time of the Earth, for:

.365.25×365.25=133333—

Our formula *for the distances of planets* from their periodic times gives 95,375,000 miles as the mean distance of the Earth from the sun. By the formula *for rotary periods*—having the Earth's day and the Earth's diameter—we obtain the *orbit*, and *from this orbit obtain* 95,375,000 *miles as the mean distance.* The one method proves the other.

It is the boast of astronomy that it has been able to obtain by instrumental measurement and trigonometrical calculation the distance of the Earth from the Sun within one three hundredth part, say 300,000 miles. (Hind's Solar System.) It is questioned by some whether this distance is obtained within millions of miles. (Young's Lectures.)

AN EDICT AGAINST FREEBOOTERS.

LATEST FROM MEXICO.—The greatest enthusiasm, it is said, prevails in Sonora. The Governor, Manuel Gandara, had issued a proclamation on the 10th November at Ures, declaring:

First. All foreigners landing on the Mexican territory without permission of the authorities, and forming themselves into armed bodies, will be considered and treated as PIRATES.

Second. That captains of ships transporting armed adventurers, the owners of such convicted of complicity, persons who shall hold relations with the invaders, or who shall protect them and serve them, or come to their aid, or shall conceal or try to save any of them, or shall act as guides to them, or shall give them news or advice, shall also be treated as pirates.

Third. That all inhabitants who shall retire from the centres of population in order to avoid taking arms, and those who shall prove reluctant in fulfilling the obligations which are imposed upon them by their country, shall be considered suspicious, and be tried by martial law; and the least penalty to which they shall be liable shall be that of incorporation in the corps of veterans.

A LITERARY DISCOVERY.

FROM THE LONDON ATHENÆUM OF OCTOBER 22.

Since the return of the Earl of ELLESMERE from the United States he has become possessed of a complete copy of an extremely important English work relating to the discovery of America. Its existence has been long recorded, and several copies, more or less mutilated, are in public or in private libraries; but, excepting the one now in the hands of Lord Ellesmere, no complete copy is known save that among Mr. Grenville's books in the British Museum. This has till now been considered unique. It is entitled "Divers Voyages Touching the Discovery of America and the Islands adjacent unto the same," &c., and was printed by Thomas Dawson for Thomas Woodcocke in 1582, 4to. It was compiled and prepared by the celebrated Richard Hakluyt, who dedicated it to Sir Philip Sidney. The most remarkable feature belonging to the copies of Lord Ellesmere and of the Museum is, that they each contain both the ancient maps; one, of the world as known in 1527, which was sent from Seville to the Ambassador of Henry the Eighth residing at the Court of Charles the Fifth; the other, of both hemispheres north of the tropic of Cancer, which is addressed by Michael Lok, citizen of London, *illustri viro Philippo Sidnæo*, and was contributed by him to Hakluyt's production. The last is most interesting, since it shows the precise state of discovery in the east and in the west up to the year 1582, which date is in the corner. The maps are mentioned on the title-page; but the last, excepting in the two instances pointed out, is invariably wanting, and the first is of the rarest occurrence. The compiler of "The Bibliographer's Manual" in 1834 did not know of a single copy of Hakluyt's "Divers Voyages," &c. containing either map; and Mr. Grenville, in the catalogue of his library, published in 1842, triumphed in the notion that he was the owner of the only copy illustrated by *both* maps. Until now it was thought by persons least acquainted with the subject that he had a right to do so. Lord Ellesmere did not obtain this rarity on the other side of the Atlantic, where, in its original state, it is unknown; and it is a singular circumstance that it should have fallen into his hands so recently after his return from New York.

THE UNITED STATES COURTS OVERRULED BY AN ERIE JUSTICE OF THE PEACE.—It is a disagreeable task to record from day to day the various steps in the progress of madness exhibited at Erie. We have just learned by telegraph that three of the men engaged by the Erie and Northeast Railroad Company in repairing their track, under the authority of the recent injunction granted by the United States District Court, have been arrested for being thus engaged, tried before a Justice of the Peace, and fined. The Justice of the Peace held that the action of the United States Court was null and void, and proceeded to fine each of the men arraigned in the sum of ninety dollars. Assuredly there can be no excess of violence or folly to which these creatures may not now be expected to resort.

Yesterday afternoon the mob attacked with eggs and other missiles the deputy United States marshal for serving the process of the United States Court. The mail train for the West last evening was left east of the breach, and cannot move until the damage done by the rioters can be repaired.

The question on every man's lips is, "How much longer are these men to be permitted to put at defiance all decency and all law?" There should be measures adopted to put a stop to such proceedings promptly and severely.

[*Cleveland Herald, 22d.*

MUNIFICENT BEQUESTS.—The late ANSON G. PHELPS, of the city of New York, after providing amply for his widow, one hundred thousand dollars for each of his children, ten thousand dollars to each of his grandchildren, and an additional five thousand to each of them, to be paid by the executors, with the injunction from him to use the increase of this fund sacredly for benevolent purposes, and transmit it to their heirs with the same injunction, and after making several bequests to relations, has left the following sums to various benevolent objects, providing for their payment in instalments during a term of years:

To the American Bible Society	$100,000
To the American Board of Commissioners for Foreign Missions	100,000
American Home Missionary Society	100,000
To literary and theological education in Liberia, Africa, subject to the control of the Executive	50,000
Union Theological Seminary, N. Y.	5,000
Institution for the Blind	5,000
New York State Colonization Society	5,000
Auburn Theological Seminary	3,000
Half Orphan Society, 6th avenue	1,000
Colored Orphan Society	1,000
Congregational Church, Simsbury, Conn., for the use of the poor	1,000
	$371,000

In addition to the above, Mr. Phelps, just previous to his death, placed in the hands of his son $100,000, the interest to be used at his discretion for the spread of the Gospel, and the principal eventually to be invested equally for the benefit of the American Bible Societies and the A. B. of C. for Foreign Missions.

This disposition of Mr. Phelps's property, including the amount given to each of his twenty-two grandchildren, makes the munificent bequest of $581,000 for religious and benevolent purposes.—*Commercial Advertiser.*

DEATH FROM OFFICIAL CRUELTY.—In New Orleans one night last week Mr. JAMES DUNCAN, "a highly respectable young gentleman," in the midst of a storm and in a condition requiring assistance, went of his own accord to a police station-house to dry and warm himself. He committed no offence, unless it be one to "guardians of the night" for a person to need at their hands a little human help; that, instead of giving him this, or even taking him home, they locked him up, wet and exhausted as he was, in a place so exposed to the weather that his death ensued within a few hours after his release from their hands. A coroner's jury returned a verdict according to the facts.

The wadding factory of Messrs. Stearns & Poster at Cincinnati was destroyed by fire on Friday; loss estimated at $6,000.

THE STATE OF CALIFORNIA.

FROM THE NEW YORK COMMERCIAL ADVERTISER.

We have been so much accustomed to regard California only or principally as a gold-producing State, that we have scarcely given its population the credit they deserve, or assigned to them their just place in the scale of sound progress, civilization, morality. Nor has sufficient heed been paid to the advantages other than mineral which the State itself possesses. We have been led to this conviction by a careful perusal of the California newspapers brought by the Northern Light on Saturday. These journals present a picture of commercial advancement, and a development of moral powers and dispositions, that deserve more cordial recognition than they have yet received from even American journalists.

Much, though not too much, has been said from time to time of the vast mineral resources of California. Every steamer brings its abundant proof of this seemingly inexhaustible wealth. To its gold mines, of course, the El Dorado State owes its rapid and unparalleled growth. But there are now more pleasing and wonderful developments in California than attended the discovery of its precious metal. The tendency of that discovery was to demoralization; its effect *was* demoralizing; and at one time it seemed doubtful whether it would not prove a curse rather than a blessing to the settlers in the new possession, and to some extent also to the people of the United States. All such fears may now be dismissed. Not alone is California developing matchless energy, bold enterprise, and unparalleled progress, but to an extent that could not have been anticipated as likely to occur at so early a day, her people are exhibiting refinement, moral prowess, intellectual strength, and religious aims almost as wonderful as their other characteristics; while those truer purposes of the soil, which agriculture only can develope, are rapidly engaging their attention.

Most of our readers are probably aware that the State of California is about seven hundred miles long from northwest to southeast, with an average breadth of about three hundred miles. The gold-fields cover about one-sixth of the area of the State; and it is affirmed that, making full allowance for unprofitable and mountainous land, there yet remains sufficient that is irrigable, and can be used for either arable or grazing purposes, to support an agricultural population greater than that of Pennsylvania or Virginia, all of which is public domain, i. e. the property of the United States. An impression has generally prevailed that all the best land of the State is in the hands of the Spanish grandees or of speculators who have purchased from them. This idea the California papers say is entirely erroneous; for under the operation of the United States land commission many of the most extensive claims are proving to be without the legal sanction necessary to give title under the Mexican Government, and therefore belong to the public domain of the United States. Nor does there appear to be the slightest ground to suppose that these decisions are partial or unjust toward those who have asserted such claims, it being admitted by all that the commissioners act up to the letter and spirit of the treaty of Guadalupe Hidalgo, and with impartial respect for the official acts and preserved archives of the former Government.

The amount of choice lands for the American farmer is therefore much greater than was at first supposed. The Surveyor General of the United States is actively engaged in preparing these lands for entry at the respective land offices, and "the facilities for proving pre-emptions will soon enable the settler to secure his home at the Government price, as in other new States." Here is the foundation for the permanent prosperity of California, in the greater development of those agricultural pursuits and habits which give stability to a State and to its best institutions. From facts within our knowledge, derived from a gentleman who has successfully pursued agriculture there, we incline to believe that the agricultural resources and advantages of California are far greater than has been generally believed, and that to this branch of industry attention will soon be largely directed.

In the mean time, from the seeming chaos of avarice, lawlessness, semi-barbarism, and irreligion which but little more than three years ago threatened to mar the prospects of the Pacific State, time and benevolent labor, and the practical good sense which lies at the foundation of the American character, are evolving order, civilization, morality, and respect for Christian ordinances. The journals before us supply abundant evidence of this healthful progress. Thanksgiving day seems to have been religiously observed even by the restless, eager, gold-hunting population of San Francisco; as much so, in fact, as in the most orderly city of New England. The Placer Times draws the following picture of this improved state of things:

"On the day appointed banks closed, business houses shut up, churches all opened, and really it seemed as though Yankeedom and old Virginia good cheer had moved to the salubrious western side. The people gave thanks, yes, genuine hearty thanks, expressed in their solemn forms of religious observance, in their suspension of daily toil, and in their social meetings.

"Let it be noised abroad that we were a grateful and a happy people that day; for we felt proud in our humble gratitude that the institutions cherished around the old hearthstones of our early memories were fresh among us in our new environments. The very fact of the due observance of the day gave us new cause of gratitude and thanks to the Power who holds us and all peoples in the hollow of His hand.

"We are not nearly so religious a people as many have been, and we do not even profess so much. Gold and commerce and building new cities keep us very busy. A faster people never stirred beneath the bright sun, and yet the tables of the money-changers bow in cheerful respect to the sanctity of our temples of religion, and there is no complaint or murmur among us of oppressive exaction or hypocritical meddling.

"The moral sentiment of Christian civilization spreads by reasonable degrees, constantly a little wider, over the face of our newly-organized society, and takes root a little deeper in the bosom of the compact."

We have also many gratifying facts, incidentally mentioned, which show that "the moral sentiment of Christian civilization" is gradually spreading in that community. Sunday theatricals have been prohibited by the municipal authorities, and their course is approved and supported by the citizens. Crime is more promptly punished. Fairs, or bazaars, in aid of churches, are liberally patronised, a recent one having realized $6,000. A Young Men's Christian Association is vigorously carried on. Churches are rapidly increasing, and the Gospel is preached in almost every tongue. Intellectual improvement seems to keep pace with this advancement in the respect due to moral and religious observances. The California newspapers, and especially those of San Francisco, would do no discredit to the oldest State of the Union. They are well supported, the best daily secular papers averaging a circulation of from three to five thousand. The papers before us mention three others about to be commenced. We have the proceedings also of an efficient San Francisco Medical Society; of the Academy of Natural Sciences, having its "several thousands of specimens," botanical, mineral, and conchological, and holding its meetings weekly; and other and kindred associations, showing a degree of progress in refining and elevating pursuits as surprising as it is gratifying.

There is one feature of California as it now is that is peculiarly interesting. The East and the West meet on its soil, which is thus alluded to by one of our California exchanges:

"Here the Orient and the Occident have met, shaken hands, and fraternized; the Tartar race and the Confucian swarms come now to take protection under the Bible and the starry-flag; and the intellect of a cultivated people breathes a strange impulse into the affairs of a new empire. * * * * *

"The school-house of the Yankee and his white church steeples will bring the sons of Confucius to their true bearings in the knowledge of a different God from those they worshipped across the broad water; the church-bells will drown the noise of gongs in the new temples and mosques which are arising on these shores; equal laws will mollify conflicting asperities, and the tireless industry and inventive genius of Brother Jonathan will bring this Western realm up to the standard of a nation such as Washington and Franklin hoped for and Jefferson and Jackson breathed upon."

The Unitarian Church in Taunton (Mass.) caught fire from a furnace on Sunday noon, and the flames were with much difficulty extinguished. The damage was considerable.

THIRTY-THIRD CONGRESS.

THURSDAY, DECEMBER 29, 1852.

IN SENATE.

The Hon. Mr. PHELPS, of the State of Vermont, appeared in his seat to-day.

Mr. PETTIT submitted the following resolution, and asked its immediate consideration:

Resolved, That the Committee on Military Affairs, in taking into consideration that part of the report of the Secretary of War which alludes to the removal of one of the armories of the United States or the establishment of a new one, be instructed to inquire into the expediency of locating such removal or new armory at Cannelton, in the State of Indiana.

The resolution having been agreed to—

Mr. PETTIT desired to submit, at the same time, a letter of his own to the committee, enclosing one from Hamilton Smith, calling their attention to the subject, and transmitting the circular of the American Cannel Coal Company; which states that distinguished geologists, civil engineers, and manufacturers have pronounced it the most eligible site for a manufacturing city of any now known, many having predicted that it will eventually be the great manufacturing city of the world.

Mr. ATCHISON asked the unanimous consent of the Senate—which was granted—to introduce a bill granting to the States of Missouri, Illinois, Indiana, and Ohio the right of way and a portion of the public lands to aid in the construction of a railroad from Kansas, via Jefferson city, St. Louis, and Vincennes, to Cincinnati, with a branch from Vincennes to Louisville, in Kentucky.

Mr. JAMES, in pursuance of notice, introduced the following joint resolution for the presentation of a sword to the nearest male relative of the late Major Samuel Ringgold:

Resolved, &c. That in testimony of the appreciation by Congress of the gallant acts and private worth of the late Major SAMUEL RINGGOLD, who was slain in command of the Light Artillery in the glorious battle of Palo Alto, the first in the war with Mexico, the President of the United States is requested to present a sword to the nearest male relative of that distinguished officer.

Mr. BRODHEAD, from the Committee on Naval Affairs, reported a bill for the relief of John Gouder, jr. and John Duff.

Mr. B. stated that this bill had been thoroughly investigated at the last session, and was passed by the Senate; that it had now been favorably considered by the committee; and he should ask to have the bill read. And, after a word of explanation, he would further ask the unanimous consent of the Senate to allow the bill to be passed.

The CHAIR having suggested that there was not a quorum present, the bill could not be acted on.

On motion, the Senate then adjourned.

HOUSE OF REPRESENTATIVES.

The House did not sit to-day, having adjourned over till Saturday next.

We understand that the following gentlemen have been appointed a committee to accompany the remains of the Hon. BROOKINS CAMPBELL, which left the city last evening for his late residence in Washington county, East Tennessee: Hon. Messrs. S. A. SMITH, of Tennessee; R. M. BUGG, of Tennessee; W. B. W. BENT, of Georgia; and B. C. EASTMAN, of Wisconsin.

FRIDAY, DECEMBER 30, 1853.

IN SENATE.

The PRESIDENT of the Senate laid before the body a communication from the Treasury Department, showing the number and names of the persons employed on the coast survey during the year ending 30th September, 1853, their compensation, and the time of their employment, together with a statement of the expenditures made under the direction of the superintendent; which was ordered to lie on the table and be printed.

Also, a letter from the Secretary of the Treasury communicating a report from the Superintendent of the Coast Survey, showing the progress of the work during the year ending November 1st, 1853; which was read, and the motion to print referred to the Committee on Printing.

Mr. BENJAMIN presented the petition of Henry Yates and Archibald McIntyre, of Albany, New York, representing that they are owners of certain lands sold by the United States, and asking authority to locate an equal quantity of land on any of the unsold and unappropriated lands in the State of Louisiana. Referred to the Committee on Private Land Claims.

Sundry documents were withdrawn from the files, on motion of several Senators, and again referred to appropriate committees.

BANKING IN THE DISTRICT OF COLUMBIA.

Mr. FISH gave notice of his intention to introduce a bill to authorize the business of banking in the District of Columbia and to regulate the issuing and circulation of notes as money.

Mr. FITZPATRICK gave notice that he would introduce a bill for the relief of Joshua Kenedy.

REPORTS FROM COMMITTEES.

Mr. SEBASTIAN, from the Committee on Private Land Claims, reported a bill for the relief of the heirs and legal representatives of Uriah Prewitt.

Also, from the same committee, asking to be discharged from the further consideration of the petition of John B. and Thomas Johnson, and that it be referred to the Committee of Claims; which was agreed to.

Mr. ALLEN, from the Committee on Private Land Claims, reported a bill for the relief of Ira Baldwin, accompanied by a report.

Mr. HAMLIN moved, at the request of the Senator from Florida, (Mr. MALLORY,) that said Senator should be excused from serving on the Committee on Printing, on the ground that the state of his health was such as to prevent his attendance.

The motion having been agreed to, the President of the Senate appointed Mr. FITZPATRICK to supply the vacancy.

On motion, the Senate adjourned to Tuesday.

Telegraphic Correspondence.

THREE DAYS LATER FROM EUROPE.

The steamer Africa, with Liverpool dates of the 17th instant, arrived at New York yesterday. The following is a Telegraphic summary of her news:

Lord PALMERSTON has resigned his seat in the British Cabinet. Some of the London papers attribute this step to a disagreement in the Cabinet in relation to the Turkish question; but the London Times denies that it had any connexion with that question.

Letters from Bucharest of December 5th announce the suspension of hostilities on the Danube.

The impression at Vienna was still strong that the Eastern question could be satisfactorily arranged.

It was reported that a Russian naval division, with 6,000 troops on board, had been repulsed at Cheftikil. One Russian steamer was destroyed, a frigate dismasted, and 1,500 Russians killed.

Another engagement had occurred near Abaca between two Turkish steamers and a Russian frigate and brig, when the latter withdrew badly shattered.

The allied steamers had gone to Constantinople.

The Russian manifesto of November 1st had caused great excitement in Greece, and the Government was taking severe precautionary measures.

It was reported at Vienna on the 13th that the combined Russian and Persian army was about marching on Erzerum.

The defeat at Sinope had caused a great sensation at Constantinople, and a grand divan was immediately held, at which all the foreign Ministers were present. There was no doubt that the whole allied fleet would soon enter the Black Sea.

The carnage at Sinope was immense. The Turks lost eleven and not thirteen vessels, of which three were transports; the Russians lost seven ships, including two of the largest class. The town was completely destroyed.

In an engagement on the Black Sea, between several Russian vessels and three Turkish steamers, two of the latter escaped, and the third was blown up by her commander rather than surrender.

The Russians fired into a Turkish brig near Odessa and sunk her; all on board perished.

Ten powerful Turkish steamers left the Bosphorus on the afternoon of the 2d.

The Russian Consul at Servia has denounced Prince ALEXANDER of Servia as a secret adherent of the Porte. The Elders of the various districts met and resolved to watch his movements.

It was rumored that an insurrection had broken out in Russian Armenia.

The Russians had defeated the Turks on the Armenian frontier, the latter sustaining a loss of 4,000 men. Notwithstanding this reverse, the Turks continued successful. They had captured Alkahalizh and the important fortress of Alexandropolis.

SCHAMYL, the Circassian leader, and LELIN PASHA were gradually approaching each other, taking all the Russian fortresses on the line of their march. Prince WORANZOFF was surrounded on all sides at Tiflis, and his retreat entirely cut off. SCHAMYL had taken six Russian fortresses after hard fighting and great loss on both sides. He had also totally defeated 15,000 Russians under Gen. ORLIANOFF.

LIVERPOOL, DEC. 17.—Cotton is unchanged; sales of the week 53,000 bales. Breadstuffs active at 6d. advance in flour, 2d. a 3d. in wheat, and 1s. 6d. in corn. Beef and pork were dull, at [illegible] favoring buyers. Holders of bacon were pressing on the market. Lard had declined 1s. a 2s. Iron active, and tending upwards. Consols closed at 94⅞ a 94¼.

Severe Storm.

BOSTON, DECEMBER 29.—The snow is now eighteen inches deep on a level, but in many places is drifted to the height of ten feet, rendering the streets almost impassable. The railroad tracks are blocked up, and none of the trains from Providence, Portland, or New Bedford, nor any of the steamboats have arrived.

Later from Havana.

CHARLESTON, DEC. 25.—The mail steamer Isabel, with Havana dates of the 22d instant, arrived this morning.

The new Governor General of Cuba has signalized his determination to do all in his power to prevent the landing of slaves, and also to capture slavers approaching the island, but says he can take no action after slaves shall have been placed upon the estate of their owner.

There was a grand review of the troops at Havana on Tuesday, in honor of the birthday of the heir apparent. Three thousand troops were under arms. Another act in honor of the day was the publication of the liberty of the Emancipados.

Baltimore Markets.

BALTIMORE, DEC. 30.—The advices by the Africa have caused activity and firmness in flour. Howard street and City Mills were sold before the news at $7; afterwards holders advanced their prices to $7.12. There has been an unusually active business in flour this week, the amount sold being about 60,000 barrels—the largest transactions of any one week for many years. Wheat sold before the news at 155 a 160 to 162 for good to prime red, and 163 a 168 cents for white; it is now held higher. White corn 60 a 62, yellow 64 a 66 cents; rye and oats unchanged—former 78 a 82, latter, Pa., 43 a 45; Md. oats 39 a 42, Va. 37 a 40 cents; cloverseed $6.37 a $6.62.

The tobacco market is very quiet. Sales only of a few hogsheads during the week. The stock on hand is very light; no change to notice in prices, which are merely nominal.

Sales of Baltimore and Ohio Railroad shares 56½ a 57¼. The money market is easier; brokers are discounting freely.

New York Markets.

NEW YORK, DEC. 30.—Flour has advanced 18 cents. Sales of 10,500 barrels at $7.75 for State, Ohio, and Southern; wheat wanted; sales of 17,000 bushels of corn at 81 cents for old mixed, and 75 for new white.

[No. 495.]

NOTICE of withdrawal from private entry of certain lands lying within fifteen miles on each side of the route of the proposed RAILROAD from SHREVEPORT, LOUISIANA, to VICKSBURG, MISSISSIPPI.

In consequence of urgent representations on behalf of the interests of the proposed railroad above mentioned, the President of the United States has directed that, for the present and until *the 7th of June next*, the public lands lying within fifteen miles (or thereabouts as near as may be) on either side of the route of said road, being the undermentioned townships, be withheld from sale or entry, except valid pre-emption claims, which are excluded from the operation of this notice; and special instructions to that purport have been accordingly given to the proper land officers, to wit:

In the district of lands subject to sale at MONROE, LOUISIANA:

North of the base line and east of the meridian.

Townships fifteen, sixteen, seventeen, eighteen, nineteen, and twenty, of ranges one to six, inclusive.

Townships fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, and twenty, of range seven.

Townships fourteen, fifteen, sixteen, seventeen, eighteen, and nineteen, of ranges eight to fourteen, inclusive.

Townships fifteen and sixteen, of range fifteen.

North of the base line and west of the meridian.

Townships fifteen, sixteen, seventeen, eighteen, nineteen, and twenty, of ranges one to five, inclusive.

In the district of lands subject to sale at NATCHITOCHES, LOUISIANA, viz:

North of the base line and west of the meridian.

Townships fifteen, sixteen, seventeen, eighteen, nineteen, and twenty, of ranges six to thirteen, inclusive.

Given under my hand, at the General Land Office, city of Washington, this 17th day of December, 1853.

By order of the President:
JOHN WILSON,
dec 21—w13w Commissioner of the General Land Office.